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TS

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/294,341 04/20/99 HIROKI

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022204

TM02/1121

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EXAMINER

ZAMANI, A

ART UNIT

PAPER NUMBER

2674

4

DATE MAILED: 11/21/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

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Office Action Summary

Application No.
09/294,341

Applicant(s)
Masaaki Hiroki

Examiner
Ali Zamani

Group Art Unit
2674



- ☐ Responsive to communication(s) filed on _____
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

- ☒ Claim(s) 1-7 _____ is/are pending in the application.
- Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-7 _____ is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claims _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of References Cited, PTO-892
- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 3
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki (US Pat. No. 6,011,533).

3. In regard to claims 1-7, Aoki discloses an image display device comprising: a liquid crystal panel (100) having a switching element for every pixel electrode (114), a scanning line driving circuit (102) for driving scanning lines of liquid crystal panel (100), a signal line driving circuit (110a and 110b) for driving signal lines of liquid crystal panel (100), a control circuit (20) for controlling driving liquid crystal panel (100), a video signal processing circuit (col. 1, lines 17-29), a producing circuit (32) for producing a phase difference in a second signal with respect to a phase of a first signal which is inputted to signal line driving circuit (110a and 110b) or to scanning line driving circuit (102). Aoki teaches that the phase-expanded signals that have been converted to a time length of data that is longer than the first sampling period, and outputs in parallel with different head positions of the pixel data in the phase-expanded signals on the basis of a reference clock signal and during this time, the sampling signal generation (106) may supply

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the sampling signals to the plurality of sampling with different head positions of the second sampling periods in the sampling signals. This insures that the pixels connected to each of the scan signal lines can be driven by a point-at-a time scanning. Aoki also teaches that the sampling signal generation (106) may comprise a shift register which outputs a signal later than a preceding signal by one cycle of a reference clock signal the $(3m-2)$ th output of the shift register within one horizontal scanning period of time can be input to the plurality of sampling, and the second sampling period of the sampling means can be N times one cycle of the reference clock signal (Fig. 16, col. 4, lines 14-42). As to claim 7, Aoki teaches that wherein said image display device is a projection type display (Fig. 28) including a projection light emitted from a lamp unit (1102) that is a light source and a transmission type of liquid crystal panel (col. 20, lines 7-43). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a display device which is capable of reducing the influence which is exerted on the image display by the noises generated in the shift register circuit.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sakaedani et al. and Nakamura et al. are made of record to show various types of LCD and the method of driving.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Zamani whose telephone number is (703) 308-6414. The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A. Hjerpe, can be reached on (703) 305-4709. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-9051.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Ali Zamani

November 17, 2000


XIAO WU
PRIMARY EXAMINER